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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,661	07/03/2003	Maximilian Hogl	P-986A	7270
7590	03/26/2004		EXAMINER	
Scott R. Cox Suite 2200 400 West Market Street Louisville, KY 40202			PRINCE, FRED G	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/613,661	HOGL ET AL.
	Examiner Fred Prince	Art Unit 1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 August 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 23-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 23-54 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0803.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 23-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,589,425. Although the conflicting claims are not identical, they are not patentably distinct from each other because the elements claimed in the patent may be construed broadly enough to encompass the elements of the instant claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim's 53-54 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 53 recites the limitation "the carbon-containing material" in line 2. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 54 recites the limitation "the carbon-containing carrier substance" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 50 is rejected under 35 U.S.C. 102(b) as being anticipated by Pradt et al.

Pradt et al., directed toward a process for treating waste water, teach treating highly loaded with ammonium at a level of at least about 200 mg/liter (col. 3, lines 42-46), comprising treating the waste water with a nitrifying microorganism (col. 2, lines 65-68) in the presence of a carbon-containing substance including activated charcoal (col. 2, lines 1-5).

9. Claim 50 is rejected under 35 U.S.C. 102(b) as being anticipated by Fuchs.

Fuchs, directed toward a process for treating waste water, teaches treating highly loaded with ammonium at a level of at least about 200 mg/liter (col. 2, lines 15-20), comprising treating the waste water with a nitrifying microorganism (col. 2, lines 21-24) in the presence of a carbon-containing substance including activated charcoal (claim 4).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 51-52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Pradt et al. or Fuchs in view of Pirbazari et al.

Pradt et al. and Fuchs are described above. Neither reference discloses the limitation of claims 51-52, and 54.

Pirbazari et al., also directed toward a process for treating waste water, discloses maintaining a pH of about 6 to 9 (col. 6, lines 53-66; col. 7, line 19) in order to facilitate the growth of beneficial microorganisms and utilizing a carbon-based substance in the range of 10-30 g/l (col. 2, lines 45-47) in order to have a desired food to microorganism ratio (col. 7, lines 37-40).

It would have been obvious for the skilled artisan to have modified either Pradt et al. or Fuchs such that either process includes maintaining a pH of about 6 to 9 in order to facilitate the growth of beneficial microorganisms and utilizing a carbon-based substance in the range of 10-30 g/l in order to have a desired food to microorganism ratio, as suggested by Pirbazari et al.

12. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Pradt et al. or Fuchs in view of Chudoba et al.

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Pradt et al. and Fuchs are described above. Neither reference discloses particles having the recited size.

Chudoba et al., also directed toward a process of treating waste water, discloses providing particles having the recited size (col. 1, lines 55-59) in order to rapidly immobilize a biofilm (col. 2, lines 14-18).

It would have been obvious for the skilled artisan to have modified the method of either Pradt et al. or Fuchs by providing particles having the recited size in order to rapidly immobilize a biofilm on the particles, as suggested by Chudoba.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited of interest to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Prince whose telephone number is (571) 272-1165. The examiner can normally be reached on Monday-Thursday, 6:30-4:00; alt. Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred G. Prince
FRED G. PRINCE
PRIMARY EXAMINER
3/11/04